REMARKS

This responds to the Office Action mailed on May 17, 2004 and to the Advisory Action mailed on September 9, 2004.

Claims 1, 3, 8, 9, 13, 15, 16, 18-21, 24, and 26 have been amended. Claims 27-30 have been added. No claims have been cancelled. Claims 1-13 and 15-30 are now pending in this application.

The claim amendments proposed in the Amendment filed by Applicant on July 19, 2004 were not entered.

Interview Summary

Applicant gratefully acknowledges the telephone interview held on September 14, 2004, between Examiner Daniel Swerdlow and Applicant's representative, Lucinda Price. At least one currently pending independent claim and the Karlsen reference were discussed. The Examiner suggested clarification of the phrase "real-time error." No agreement was reached.

Amendments to the Specification

The specification, including the title, has been amended for clarity. No new matter has been added. Marked-up versions of the particular paragraphs are submitted herewith showing changes from the original version. Applicant respectfully requests that the amended paragraphs be entered in this case.

Amendments to the Claims

Claims 1, 3, 8, 9, 13, 15, 16, 18-21, 24, and 26 have been amended. No new matter has been introduced.

The amendments to the claims are made to satisfy Applicant's preferences, not necessarily to satisfy any legal requirement(s) of the patent laws, and they are not intended to limit the scope of equivalents to which any claim element may be entitled.

Independent claim 1 has been amended to include "when a data interruption occurs." Independent claim 15 has been amended to include "storing an echo model when a data

timing error occurs to create a stored model." Support for these amendments can be found, for example, at page 5, lines 18-20 of Applicant's original disclosure.

Claim 9 has been amended to include "wherein the system further comprises a FIFO, wherein the real-time error includes at least one of data interruption, delayed data, lost data, a data timing error, a streaming error, and the FIFO at least one of overruns and underruns." Claim 16 has been amended to include "wherein the data timing error includes at least one of data interruption, delayed data, lost data, a real-time data error, and a streaming error." Independent claim 18 has been amended to recite in part: "recognizing an occurrence of a real-time data interruption error." Independent claim 24 has been amended to include "when one or more of a data timing error, a data interruption, delayed data, lost data, a real-time data error, and a streaming error occurs." Support for these amendments can be found, for example, at page 5, lines 18-25, page 6, lines 5-11, and page 7, lines 25-28 of Applicant's original disclosure.

Minor amendments have been made to claims, including claims 3, 8, 13, 19-21, and 26, to put them in better form.

New Dependent Claims 27-30

New dependent claims 27-30 have been added to provide Applicant with additional protection to which Applicant is entitled. No new matter has been introduced.

Support for the additonal subject matter of added claims 27-30 can be found, for example, at page 5, lines 18-20 and at page 6, lines 5-11 of Applicant's original disclosure.

Support for additional subject matter of added claims 28-30 may additionally be found, for example, in claims 19 and 20 of Applicant's original disclosure.

§102 Rejection of the Claims

Claims 1-6, 15, 16, 18-20, 22 and 23 were rejected under 35 USC §102(b) as being anticipated by Karlsen et al. (WO 97/15124 A1). This rejection is respectfully traversed.

The Office Action stated on page 5, paragraph 11 that Karlsen discloses "detection of the programmable filter performing more poorly than the adaptive filter (i.e. a real-time error) (Fig. 7, step 530)". Further, the Office Action stated on page 7, paragraph 18 that Karlsen

discloses "when a real-time error occurs" at Fig. 7, step 730, and at page 11, lines 1-6 of Karlsen. Respectfully, Applicant disagrees.

In fact, step 530 of Karlsen "performs the test in accordance with condition (6)" which is "$q_a > Aq_p + B$" where q_a and q_p are the quality measures for the adaptive filter and the programmable filter, respectively. As discussed in the Abstract of Karlsen, the "best of the two filters, as determined by the quality measure, is used for modelling the echo path (570, 580) and its filter coefficients are copied to the other filter." In addition, step 730 of FIG. 7 of Karlsen recites: "copy adaptive filter to programmable filter." Further, page 11, lines 1-6 of Karlsen discusses steps 720 and 730.

Anticipation requires the disclosure in a single prior art reference of each element of the claims under consideration. *In re Dillon,* 919 F.2d 688, 16 USPQ2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991).

Applicant respectfully submits that the Office Action did not make out a *prima facie* case of anticipation, because Karlsen does not teach each and every claim element of independent claims 1, 15 and 18. The Office Action does not show that Karlsen discloses "when a data interruption occurs" as claimed in independent claim 1, does not show that Karlsen discloses "when a data timing error occurs" as claimed in independent claim 15, and does not show that Karlsen discloses "recognizing an occurrence of a real-time data interruption error" as claimed in independent claim 18.

In particular, it is not clear to Applicant that there is an indispensable prerequisite in Karlsen that there be an interruption or an error in order that one filter be considered "best" when compared with another. Further, Applicant respectfully submits that it is not clear to Applicant how Karlsen discloses an error or an interruption.

Applicant respectfully submits that the Office Action does not make out a *prima facie* case of anticipation because the Action provides no evidence in Karlsen of the claimed subject matter. Applicant respectfully requests that the Examiner point out the specific column and line number in Karlsen where an error or an interruption is disclosed. If the Examiner cannot point out the specific column and line number, Applicant requests withdrawal of the rejection and reconsideration and allowance of the claims.

Applicant respectfully submits that independent claims 1, 15 and 18 are patentably distinguishable over Karlsen, and Applicant respectfully requests that the rejection be withdrawn.

Claims 2-6, 16, 19-23, 27 and 28 depend, directly or indirectly, on one of claims 1, 15 or 18 and are patentable over Karlsen, for the reasons argued above. These dependent claims are also patentable in view of the additional elements that they provide to the patentable combination.

§103 Rejection of the Claims

Claims 7-13 were rejected under 35 USC §103(a) as being unpatentable over Rigstad et al. (U.S. 6,044,150) in view of Karlsen.

Claims 24-26 were also rejected under 35 USC §103(a) as being unpatentable over Karlsen in view of Rigstad.

Claim 21 was also rejected under 35 USC §103(a) as being unpatentable over Karlsen in view of Yatrou et al. (U.S. 5,343,522).

These rejections are respectfully traversed.

With regard to independent claim 7, on page 7 of the Office Action, the Examiner admits that Rigstad does not anticipate "a model store to store a current echo model when a real time error occurs." Instead, the Examiner looks to Karlsen and states that Karlsen discloses "when a real-time error occurs" while citing Karlsen at Fig. 7, step 730, and at page 11, lines 1-6. Respectfully, Applicant disagrees.

The Office Action has the burden under 35 U.S.C. §103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). To establish a *prima facie* case of obviousness under 35 U.S.C. §103, the prior art reference (or references when combined) must teach or suggest every claim element. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA, 1974). MPEP §2143.

Applicant respectfully submits that the Office Action did not make out a *prima facie* case of obviousness, because the combined references, and in particular Karlsen, do not teach each and every claim element of claims 7 and 24. As previously discussed herein, the Office Action does not show that Karlsen discloses "when a real-time error occurs" or "when one or more of a

data timing error, a data interruption, delayed data, lost data, a real-time data error, and a streaming error occurs" as claimed in claims 7 or 24, respectively.

In particular, it is not clear to Applicant that there is an indispensable prerequisite in Karlsen that there be, for example, an interruption or an error in order that one filter be considered "best" when compared with another. Further, Applicant respectfully submits that it is not clear to Applicant how Karlsen discloses an error or an interruption.

Applicant respectfully submits that the Office Action does not make out a *prima facie* case of anticipation because the Action provides no evidence in Karlsen of the claimed subject matter. Applicant respectfully requests that the Examiner point out the specific column and line number in Karlsen where an error or an interruption is disclosed. If the Examiner cannot point out the specific column and line number, Applicant requests withdrawal of the rejection and reconsideration and allowance of the claims.

Applicant respectfully submits that independent claims 7 and 24 are patentably distinguishable over Karlsen, and Applicant respectfully requests that the rejection be withdrawn.

Claims 8-13 and 25-26 depend, directly or indirectly, on one of claims 7 or 24, and are patentable over the references respectively cited against them in the Office Action, for the reasons argued above. These dependent claims are also patentable in view of the additional elements that they provide to the patentable combination.

Applicant believes the additional and amended claims are patentable, and that the amendments and additions made herein are within the scope of a search properly conducted under the provisions of MPEP 904.02. Accordingly, Applicant submits that claims 1-13 and 15-30 are patentable.

Allowable Subject Matter

Applicant notes with appreciation that independent claim 17 was allowed.

Added claims 29 and 30 depend on claim 17, and they are therefore patentably distinguishable from the cited references. These dependent claims are also patentable in view of the additional elements that they provide to the patentable combination.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney Lucinda Price, located in Gainesville, Florida, at (352) 373-8804, or Applicant's below-named representative, located in Minneapolis, Minnesota, at (612) 349-9592, to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date Sept. 17, 2004 By Ann M. McCrackin

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 17th day of September 2004.

Chris Hammond — Chris Hammond

Name — Signature